

REMARKS

Reconsideration and allowance of the above-identified application are respectfully requested. Claims 1-21 are pending. Claims 1, 14, 17, 18 and 20 are independent.

**Claim Rejection – 35 U.S.C. §103(a)**

In the Office Action, claims 1-21 are rejected under 35 U.S.C. §103(a) over U.S. Patent No. 6,445,928, to Ruutu et al (hereinafter “*Ruutu et al*”) in view of U.S. Patent No. 5,883,598, to Parl et al (hereinafter “*Parl et al*”).

Applicants respectfully submit that *Ruutu et al* does not teach or suggest a “section of a representation of the signal” recited in clauses (a) through (d) of claim 1, among other claim limitations. *Ruutu et al* merely discloses that a receiver receives a signal and then measures the time difference between a particular moment in that signal and the corresponding moment in a signal received from another transmitter. A moment in a signal is not a section of a representation of a signal.

In addition, clause (b) of claim 1 and other limitations in claim 1 recite that the first section and the second section each overlap in time with the terminal section. *Ruutu et al* does not disclose or suggest any such overlap since it merely discloses comparing differences in arrival times between pre-defined moments in signals.

Applicants respectfully submit that the sections relied on in *Ruutu et al* to purportedly teach clause (c) of claim 1 are silent regarding creating a model of a section of a representation of a signal of the composite signal received by the receiver from first and second transmitters using the first section and the second section as claimed and a set of signal parameters, including initial estimates of the time offsets between the first section and the terminal section and between the second section and the terminal section. Further, there is no mention of such time offsets in *Ruutu et al* nor time offsets between the first section or second section and the terminal section, nor signal parameters as claimed.

Regarding clause (d) of claim 1, *Ruutu et al* is silent regarding creating a model as recited in clause ( c ) and correspondingly comparing a model as claimed with a terminal section as claimed. The sections relied on in *Ruutu et al* merely determine a real time difference (RTD) based on the observed time difference (OTD) of signals from different transmitters arriving at a receiver less the geometrical time difference (i.e., the time difference calculated using transmitter to receiver path lengths).

The Office Action acknowledges that *Ruutu et al* fails to disclose that at least the clauses (e) and (f) of claim 1. *Parl et al* is relied on to purportedly overcome these deficiencies of *Ruutu et al*. *Parl et al*, however, does not overcome the above-described deficiencies of *Ruutu et al* with respect to the independent claim 1. In *Parl et al*, location of a portable unit 20 is performed at a control station 22. The section of *Parl et al* relied on in the Office Action refers to processing of signals from the portable unit 20 at base stations 12. The base stations 12 in turn send signals to the control station that allow it to determine the location of the portable unit 20 (e.g., see column 5, lines 30-40 of *Parl et al*). Thus, *Parl et al* cannot teach or suggest creation of the terminal section at the terminal, nor creation of the model and its use in adopting estimated time offsets between the recited first and section sections and the terminal section recited in claim 1, among other claimed elements. Thus, for at least the foregoing reasons, withdrawal of the 35 U.S.C. §103(a) rejection of dependent claims 1-21 is believed to be proper and is respectfully requested.

In addition, the sections of *Parl et al* relied on to purportedly overcome deficiencies of *Ruutu et al* refer to outputs of correlation receivers 218 and 220 being complex phasors optionally offset in time and frequency. These correlation receivers 218 and 220 measure two tones received from the portable unit 20 relative to corresponding two base station 12 tones. The correlation receivers 218 and 220 outputs are provided to the control station 22. Thus, these optionally time/frequency offset phasors do not teach or suggest the time offsets between the first section and the terminal section and between the second section and the terminal section recited in independent claim 1, where the terminal section is a representation of signals from

plural transmitters received by a receiver and the first section and the second section are, respectively, representations of a signal transmitted by a first one of the transmitters and a second one of the transmitters that overlap in time with the terminal section. As stated above, *Ruutu et al* fails to teach such a terminal section, a first section and a second section, and the overlap as recited in claim 1.

The refining the set of signal parameters including the time offset estimates to minimize the difference between said model and the terminal section recited in clause (e) of claim 1, and the adopting of the time offsets in the refined parameter set used to minimize the difference between said model and the terminal section as the estimated time offsets between the first section and the terminal section and between the second section and the terminal section recited in clause (f) of claim 1, are not taught or suggested by the numerical analysis of the phasors discussed on columns 15-17 of *Parl et al* that are apparently relied on to teach these clauses (e) and (f) of claim 1. As stated above, phasors in *Parl et al* relate to the two tones received from the portable unit 20 relative to corresponding two base station 12 tones and not to the time offsets between the first section and the terminal section and between the second section and the terminal section recited in independent claim 1, where the terminal section is a representation of signals from plural transmitters received by a receiver and the first section and the second section are, respectively, representations of a signal transmitted by a first one of the transmitters and a second one of the transmitters that overlap in time with the terminal section.

Independent claims 14, 17, 18 and 20 recite similar limitations to those discussed above in connection with independent claim 1. Thus, for at least the foregoing reasons, withdrawal of the 35 U.S.C. §103(a) rejection of claims 1-21 is believed to be proper and is respectfully requested.

### ***Conclusion***

In view of the arguments set forth above, Applicants submit that the present application is in condition for allowance and would appreciate early notification of the same.

Appl. No. 10/525,829  
Amdt. Dated July 3, 2007  
Reply to Office Action of April 5, 2007

***Invitation for a telephone interview***

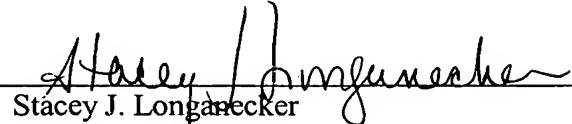
The Examiner is invited to call the undersigned at (202) 659-9076 if further issues remain with allowance of this case.

***Deposit Account Authorization***

No fee is believed due by submission of this paper. Authorization is hereby made to charge any fees due or outstanding, or credit any overpayment, to Deposit Account No. **18-2220** (Order No. 48348).

Respectfully submitted,

Dated: July 3, 2007

  
Stacey J. Longanecker  
Attorney for Applicants  
Registration No.: 33,952

**Customer No. 01609**  
ROYLANCE, ABRAMS, BERDO & GOODMAN, LLP  
Suite 600  
1300 19th Street, NW  
Washington, DC 20036  
(202) 659-9076  
(202) 659-9344 (Fax)